

Hannelore Schäl and Ulla Abdalla

Toys Made of Clay

Photos and illustrations by Angela Wiesner



CHILDRENS PRESS®

Library of Congress Cataloging-in-Publication Data

Schäl, Hannelore.

[Spielsachen aus Ton. English]

Toys made of clay / by Hannelore Schäl, Ulla Abdalla, Angela Wiesner.

p. cm.

Translation of: Spielsachen aus Ton.

Instructions for making a variety of art projects and games out of

clay. ISBN 0-516-09256-1 1. Pottery craft—Juvenile literature. 2. Toy making—Juvenile

literature. [1. Pottery craft. 2. Handicraft.] I. Abdalla,

Ulla. II. Wiesner, Angela. III. Title.

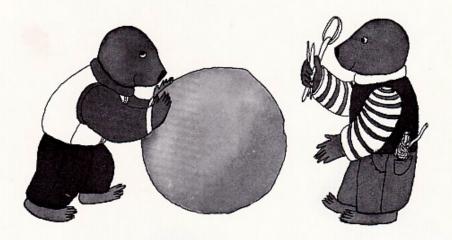
TT921.S3313 1989

745.592-dc20

89-22253

CIP

Translation by Mrs. Werner Lippmann and Mrs. Ruth Bookey



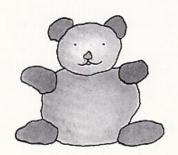
Published in the United States in 1990 by Childrens Press®, Inc., 5440 North Cumberland Avenue, Chicago, IL 60656.

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior permission in writing from the Publisher.

Copyright © 1990, 1987 Ravensburger Buchverlag Otto Majer GmbH, West Germany. Originally published in West Germany under the title Spielsachen Aus Ton.



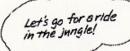
Table of Contents



- Clay Is a Small Piece of Earth
- 8 The Best Way to Do It
- 10 A Well (Q)
- 12 A Little Treasure Box
- 14 Finger Puppets
- 16 An Erupting Volcano <a> \bigo \bigo
- 18 Snail Game
- 20 Toy Stove 🕥
- 22 Marble Game
- 24 Paper-Ball Shooter (2)
- Dancing Toys 26
- 28 A Calendar 📵
- 30 A Circus
- 32 Horse and Wagon
- 34 Watercress Garden
- 36 Rocking Duck
- 38 Castle With a Moat 🙉

- 40 A Rattle and a Musical Canoe 🔊
- 42 Viking Village
- 44 Potato Oven
- 46 Elephant 🔍
- 48 Above and Below the Ground
- 50 Fragrance Ball
- 52 A Small Garden 📵
- 54 Animal Water-Squirters
- 56 Marble Maiden
- 58 Stone on Stone
- 60 Hot-Dog Grill 🙉
- 62 Bear Cave Index

64





Clay Is a Small Piece of Earth

There are different kinds of clay.

Clay is made from finely ground rocks. Over many millions of years, these rocks have been brought from the mountains into the valleys by wind and water. Today we find various clay

deposits, depending on the color of the original rocks. Clay can be red, yellow, gray, black, or white.



Where to Buy Clay

Clay can be bought in pottery stores or in handicraft stores.



The clay you buy is all ready to use. You can start right in making things with it.



You may find clay in your own yard; clay is almost everywhere. When you find clay, you can try to make some little toys from it and just let the clay dry without having it fired in a kiln.

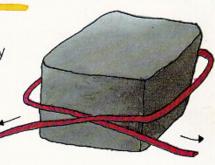
Wedging

Sometimes the clay has air pockets. Then the clay must be pounded or thrown (wedged) to get these out. Throw the piece of clay firmly against a board or on a tabletop several times.



How to Cut Off a Piece of Clay

Put a string around the middle of your piece of clay. Cross the ends of the string and pull tightly to cut the clay in half. Put the clay you are not using into a plastic bag and close the bag tightly so that the clay won't dry out.



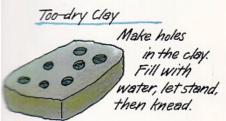
How to Shape Clay

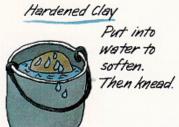


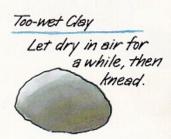
Only soft clay can be shaped. Clay shrinks a bit and gets hard when it dries. When you are making the marble games, remember to make the paths for the marbles wide enough.

How to Moisten Dried-Out Clay

Add some water to dry or leftover pieces and knead thoroughly.







Drying Clay Toys

Clay should dry slowly. Cover your clay toys with plastic sheets and let them dry in a cool place. Small clay pieces need one week to dry. Big pieces need two weeks.

Firing

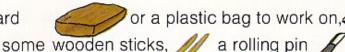
The dried clay pieces can be fired in a kiln. Kilns are available in pottery stores. (CAUTION: Do not try to use a kiln yourself. Have an adult do the firing for you.)

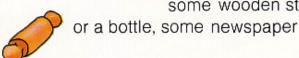


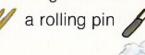
In the Table of Contents, we have marked the pieces that should be fired in a kiln with this kiln sign.

The Best Way to Do It

You will need: A wooden board

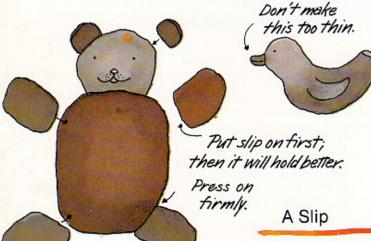






To Attach Clay Pieces to Each Other

If pieces of clay are not firmly attached to each other, they fall apart. Small pieces fall off easily if they are not attached properly.



So press the pieces together as firmly as possible and smear a thin clay "slip" between pieces smoothly, so that no crack can

be seen.

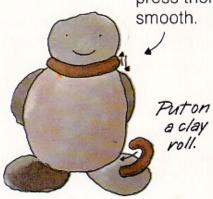
Make a slip by adding water to the clay and stirring until you have a paste.

Smooth it out

Smooth out the clay between the parts.



Or make small coils of clay, put them around the joints, and press them



Joints between two parts must always be smoothed over.

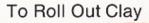


Pieces of clay that are thicker than 1 inch crack in the kiln. Hollow out thicker pieces, or make holes underneath the piece with a small stick or a knitting needle.

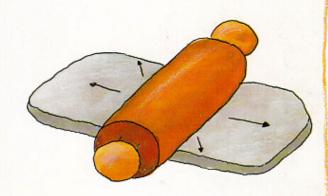
To Hollow Out Clay

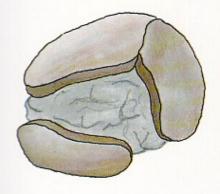
Use your fingers or a spoon to dig out clumps of clay. Make sure the walls of your dish are of equal thickness (½ to 1 inch) when you finish hollowing out.

If you take too much clay from the sides when you are hollowing out, just smear fresh clay on the area as you need it.



Press the lump of clay flat, then roll it with a rolling pin or a bottle, keeping the thickness as even as possible.





To Make a Hollow Clay Ball

Flatten a lump of clay with your fist. Make two of these and wrap them around a crumpled ball of newspaper. Blend the clay well between pieces. Continue to put flat pieces of clay over the paper ball until it is completely covered.

When to Paint Clay

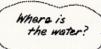
After your clay figures have completely dried and/or have been fired, they are ready to be painted.

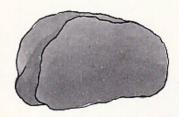


Painting tip: Use a lacquer (or shellac) over your colors, or use lacquer paint. The finish will be glossy and waterproof.



A Well





Smear the edges well.

 Form a cylinder from clay; then hollow it out.



Securely attach two clay rolls, one on each side of the cylinder.

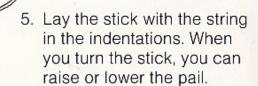
 Make an indentation on top of each attached clay roll. After the rolls have dried, a stick will be put into the indentations.

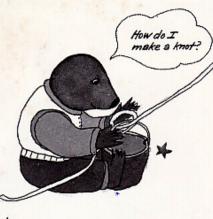
Let the well dry completely; then fire it in the kiln.

4. Then attach a thin string to the stick, and tie a small pail to the other end of the string.

Make the indentation

like this.





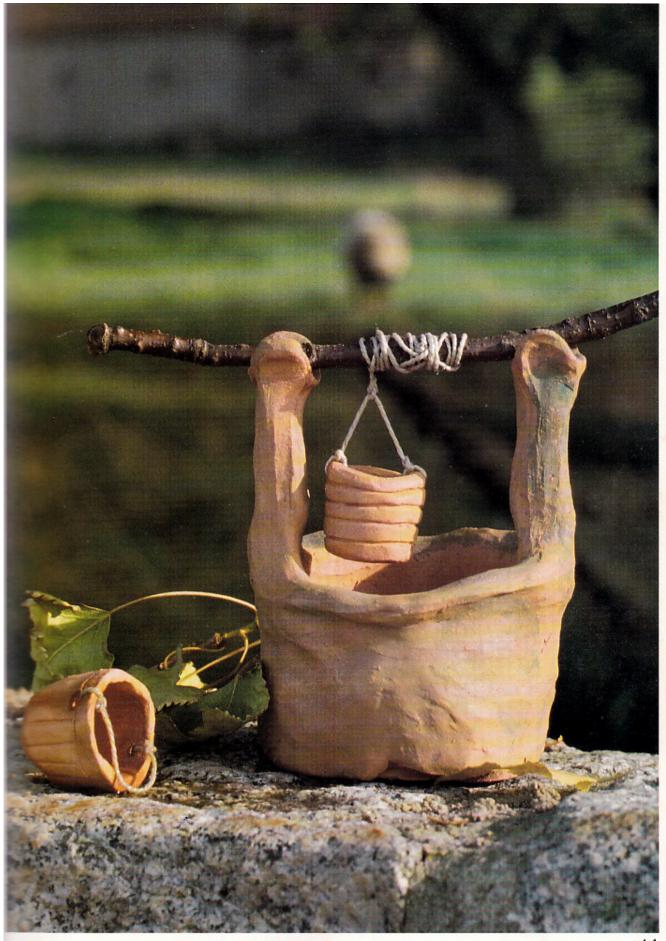
You can make a little pail out of clay.



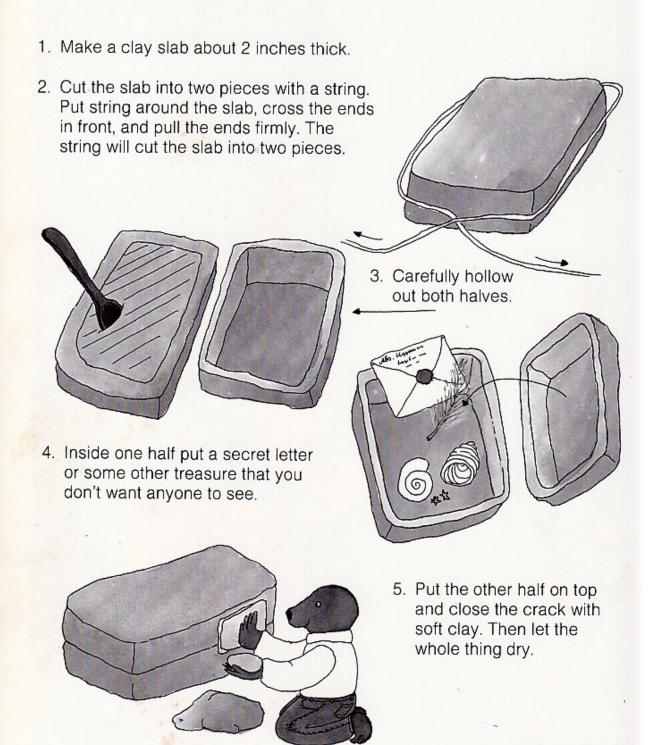
Fill your well with water and lower the pail to fill it:

10

You can scratch a brick design on the outside wall of the well.



A Little Treasure Box



Open the treasure box in this way.

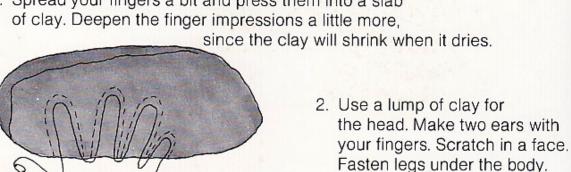
Scratch a groove where the halves meet and then tap the groove gently with a hammer.



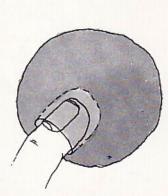
Finger Puppets

Make a little tiger.

1. Spread your fingers a bit and press them into a slab of clay. Deepen the finger impressions a little more,

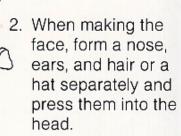






Make finger puppets.

1. Make a clay ball and press a hole into it with your finger.



Smear all the joints well.

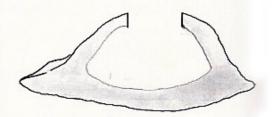
3. Paint or shellac the animals when they are completely dry.

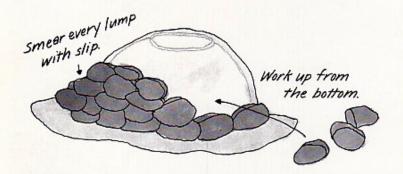


An Erupting Volcano

You will need: Clay, a bowl about 4½ inches deep, an empty vegetable can about 4½ inches high and 3 inches in diameter, aluminum foil, baking soda, white vinegar, red or yellow food coloring, newspaper

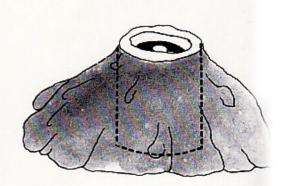
- Put foil over the inverted bowl.
- Press many small clay lumps on the bowl, starting at the bottom.
- Leave an opening 3 inches in diameter at the top.





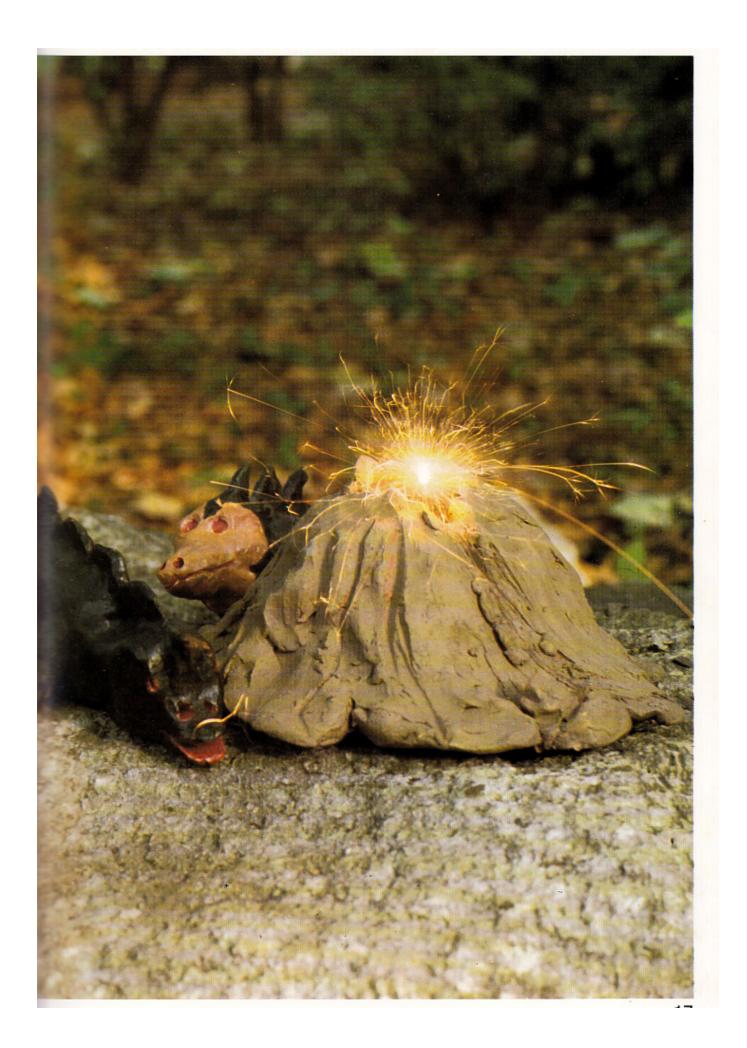
- Remove the bowl, let the volcano dry, and have it fired in the kiln.
- 5. Put 1/3 cup of baking soda in the can.

6. Place the volcano over the can so that the opening in the top fits over the rim of the can. Seal the joint between the can and the volcano with clay. There must be a tight seal. Build up a clay crater over the rim, leaving a hole in the top for the eruption. Let it all dry. (Do not put the volcano with the can into the kiln.)



To make the volcaho erupt:

Put several thicknesses of newspaper under the volcano. Put a few drops of food coloring into 1 cup of vinegar to color it red or yellow. Pour the vinegar into the volcano and watch it erupt. You can add more soda and vinegar as needed to make it erupt again.

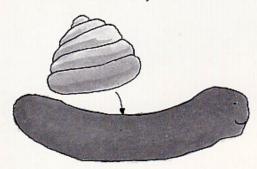


Snail Game

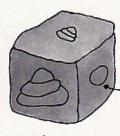
 Make a long, thin body out of clay.



 Set the snail house on top of the snail body.



The die



Make one small die out of clay. Scratch the signs _shown into it:



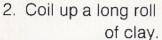
The signs mean:

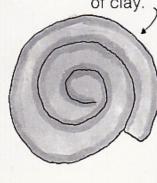
= Take another turn.



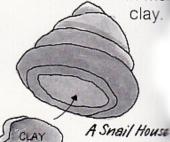
= Don't move.

= Go back one steb.

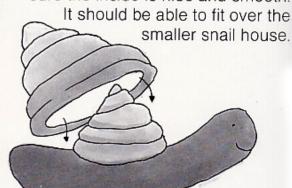




 Shape the coil into a cone to form a snail house Fill the inside of the cone with more



5. Make a second, larger snail house and leave it hollow inside. Make sure the inside is nice and smooth.



6. ☆Game Rules ☆

You can draw the board on a large piece of paper. Each person throws the die and moves his or her snail accordingly. The

snail that wins gets the bigger house to wear

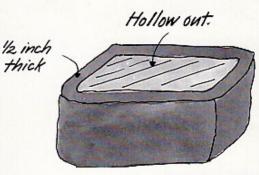


You could draw the game on a sidewalk with chalk.



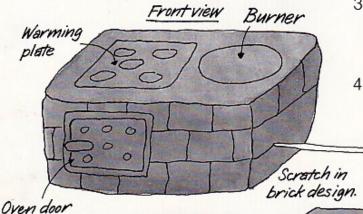
Toy Stove

- Hollow out a 2½-inch-thick clay block. Make the walls ½ inch thick.
- Turn your stove over. With a pointed stick, scratch in a door, a burner, and a warming plate. Also put in a brick pattern around the walls.



Turn the hollowed block over.

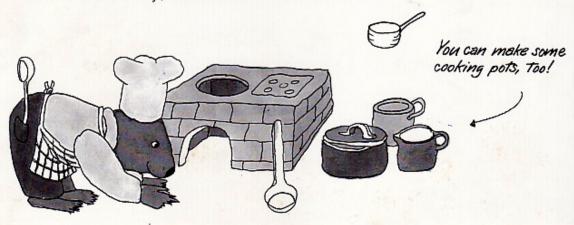
- Make some holes in the warming plate and the oven door.
- Cut out the burner hole. In the back of your stove, cut out a door. Later you can put a small flashlight through this opening to be the stove's fire.

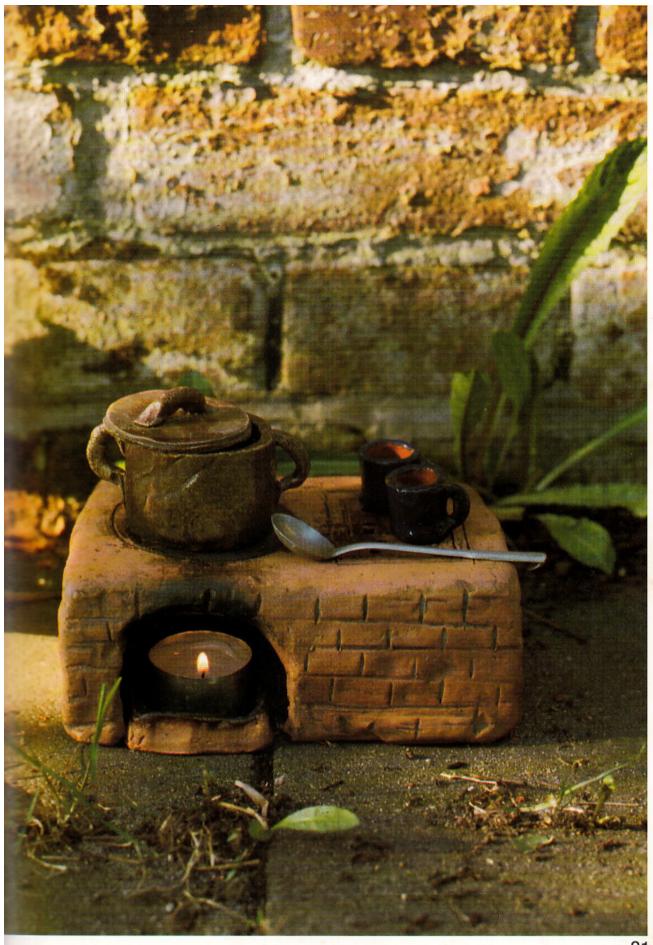


Back view

Make holes in warming plate.

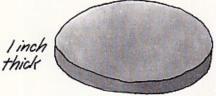






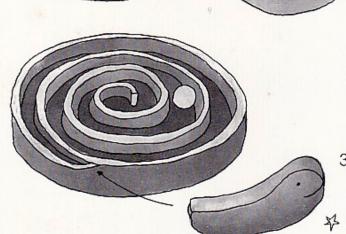


 Flatten some clay into a circle about 1 inch thick.



2. Starting from the center, hollow out a path for marbles. Make sure the path

is wider than a marble, because the clay will shrink when it dries.



Make a snake head from clay and attach it securely.

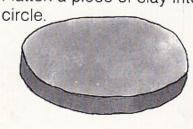
Let everything dry thoroughly.

☼ To Play

Send a marble through the path by tipping the snake.

Flatten a piece of clay into a circle.

Another Game



 Make little clay people and place them around the edge of the circle, so that their fee are touching.

3. Make a round indentation in the center of the circle



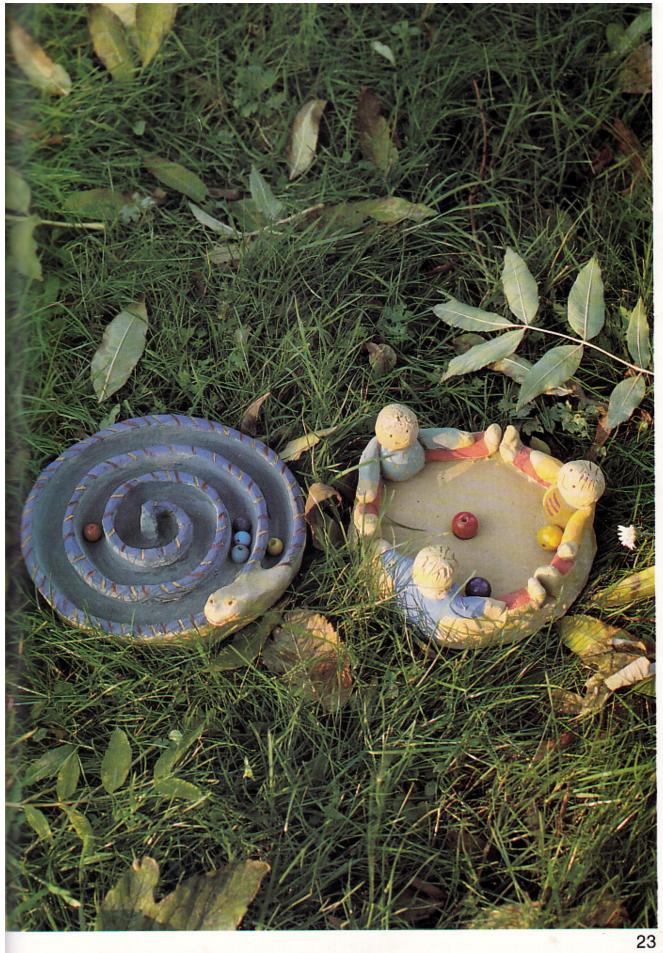
Smooth the figures on with soft clay.

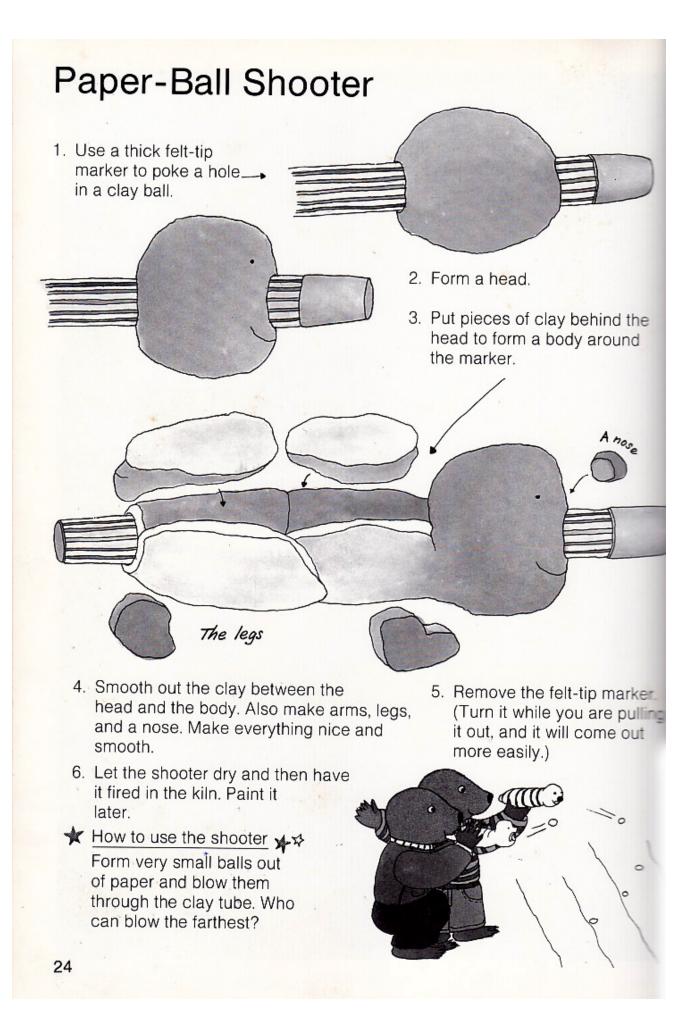
4. When the game is completely dry, paint it in bright colors.

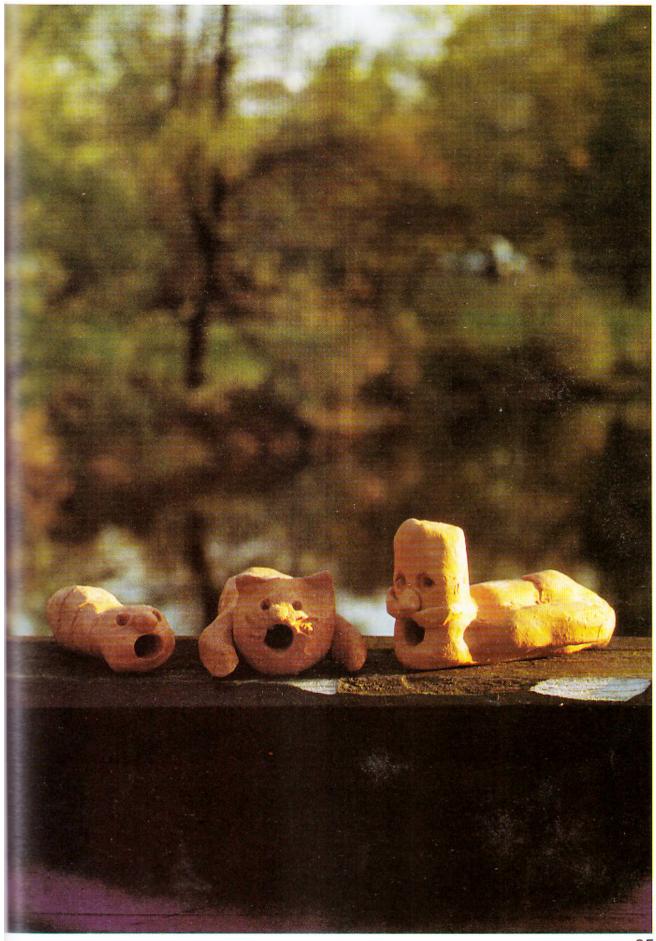
No marbles can roll out be the feet.

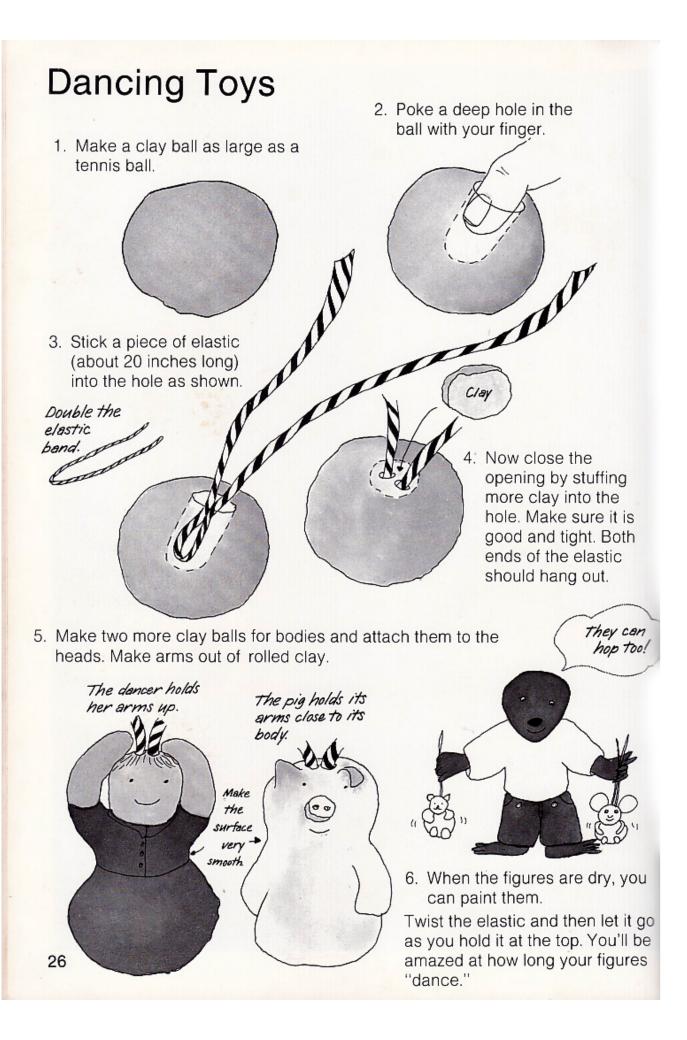
☆ To Play:

22 Try to get a marble into the center hole by tipping the game.





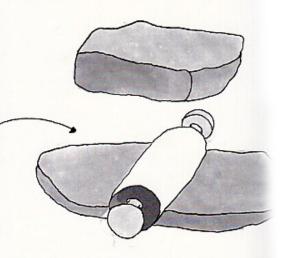


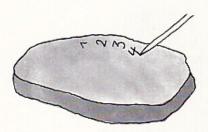




A Calendar

- 1. Cut a thick slice of clay.
- 2. With a rolling pin or a bottle, roll the slice into a slab about 1 inch thick.





- With a sharp stick, draw a calendar on the slab, as shown in the picture at the right.
- 4. With a larger stick, poke holes beside the days, months, and dates. Later you can put short sticks into the holes to tell what day and date it is.



My calendor's heavy. I'll need a big nail to hang it up.

> Smooth out the edges of your calendar. Then make two big holes at the top, so that you can hang it up later. Make sure the holes go all the way through.

 Cover the calendar loosely with plastic wrap and let it dry for two weeks. Then you can have it fired in the kiln.





A Circus

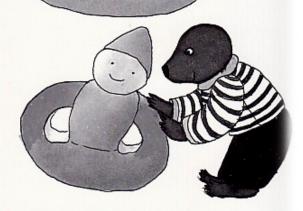
- Make a clown from a thick roll of clay.
- Make another clay roll
 and press it flat in the
 middle. Set the clown on the flat part.



Make sure it's
secure by
smearing extra
clay where two
pieces join.



- Bend the ends of the roll toward the clown's body so that they look like arms.
- Move the clown back and forth until it rocks smoothly.



А Тор

Make a clay ball. Form a cone from the ball. Make a handle. Let it dry before you play with it.

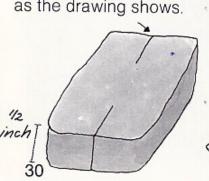


Clown Headstand

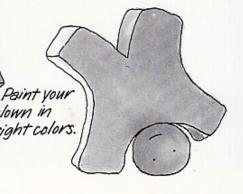
 Make a flat clay slab. Cut through on both ends and bend apart slightly, as the drawing shows.

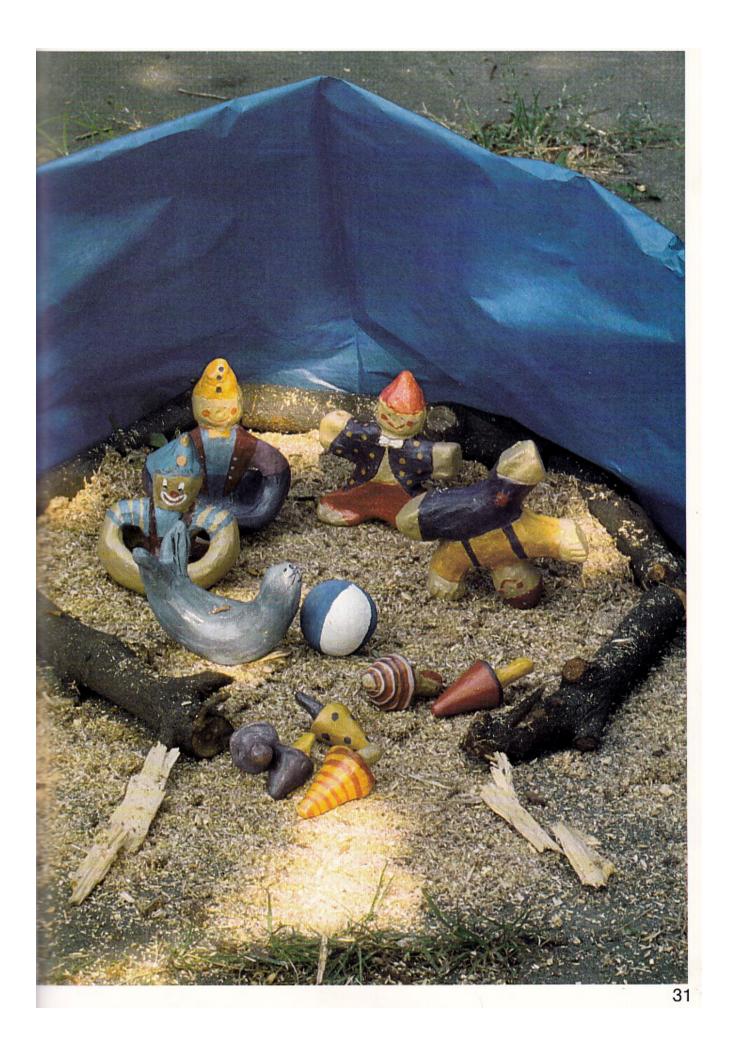
Press a small clay ball into one end. Let the figure dry.

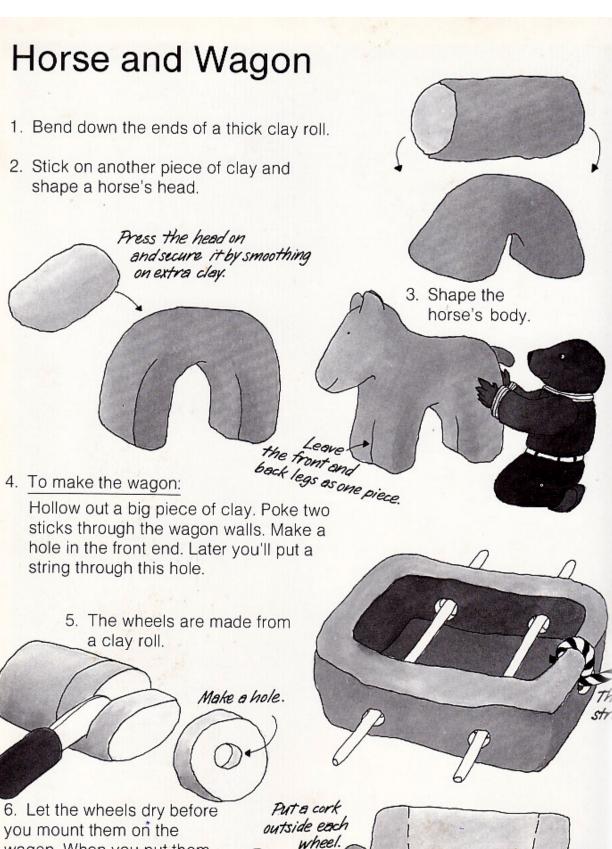
Position the clown on his head and one arm, and he'll stand by himself.





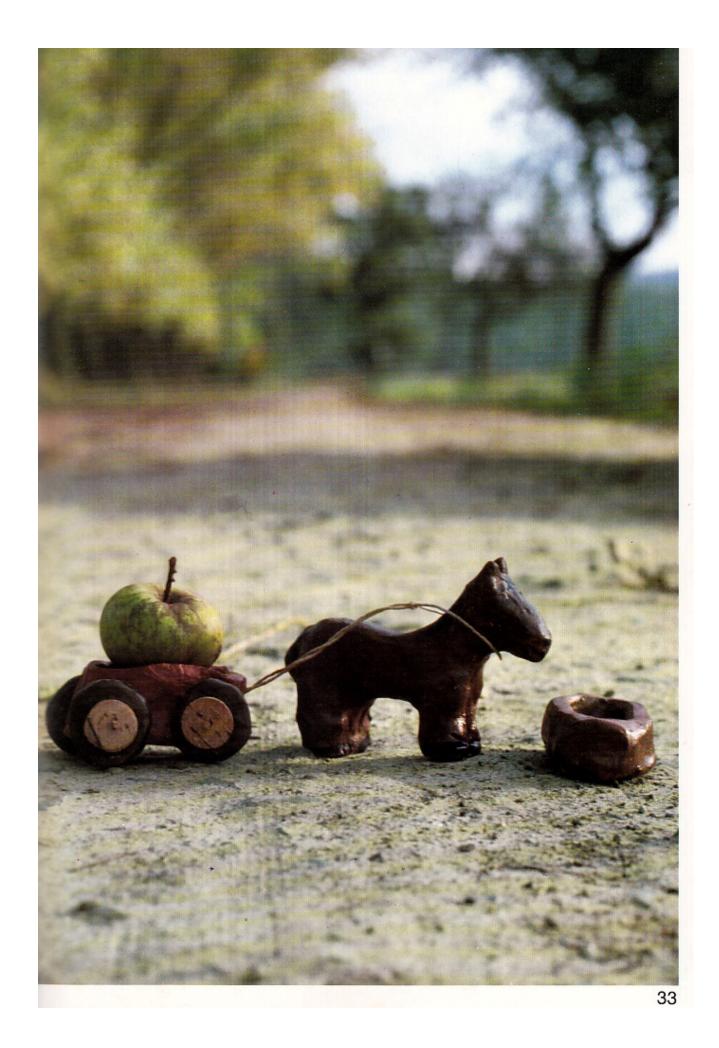


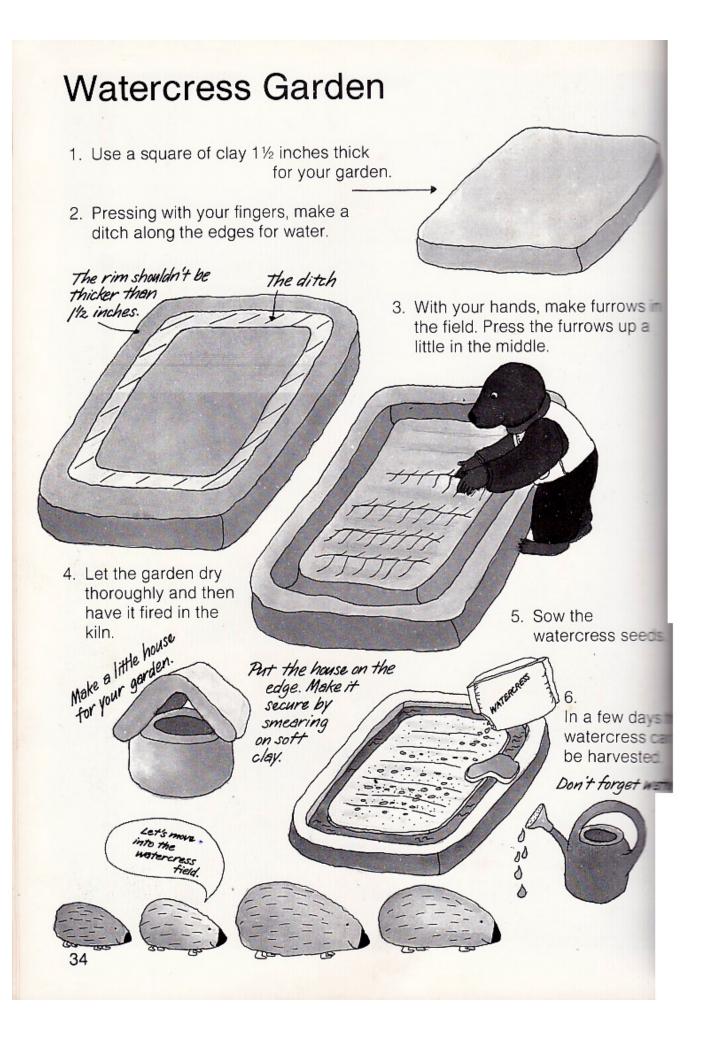


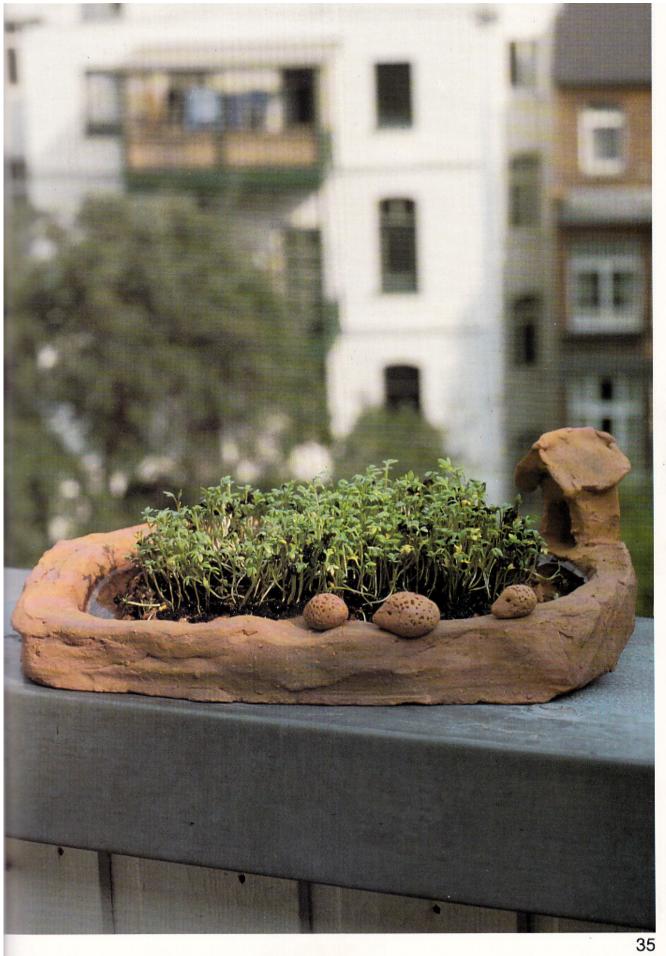


you mount them on the wagon. When you put them on, secure them with pieces of cork on the outside.

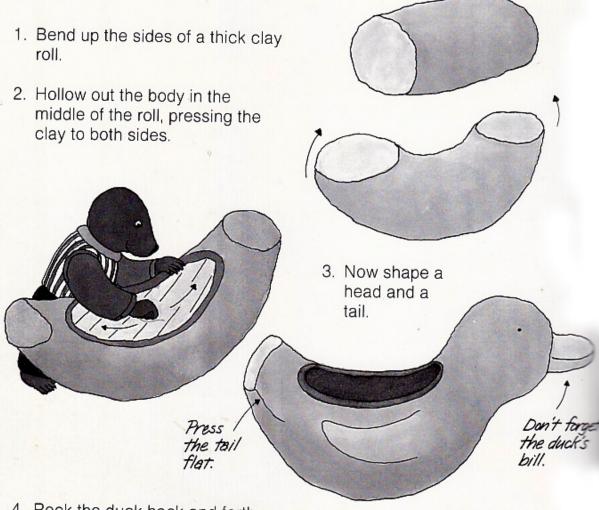
Let everything dry thoroughly.



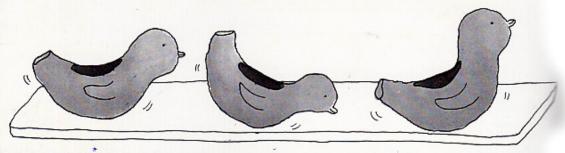




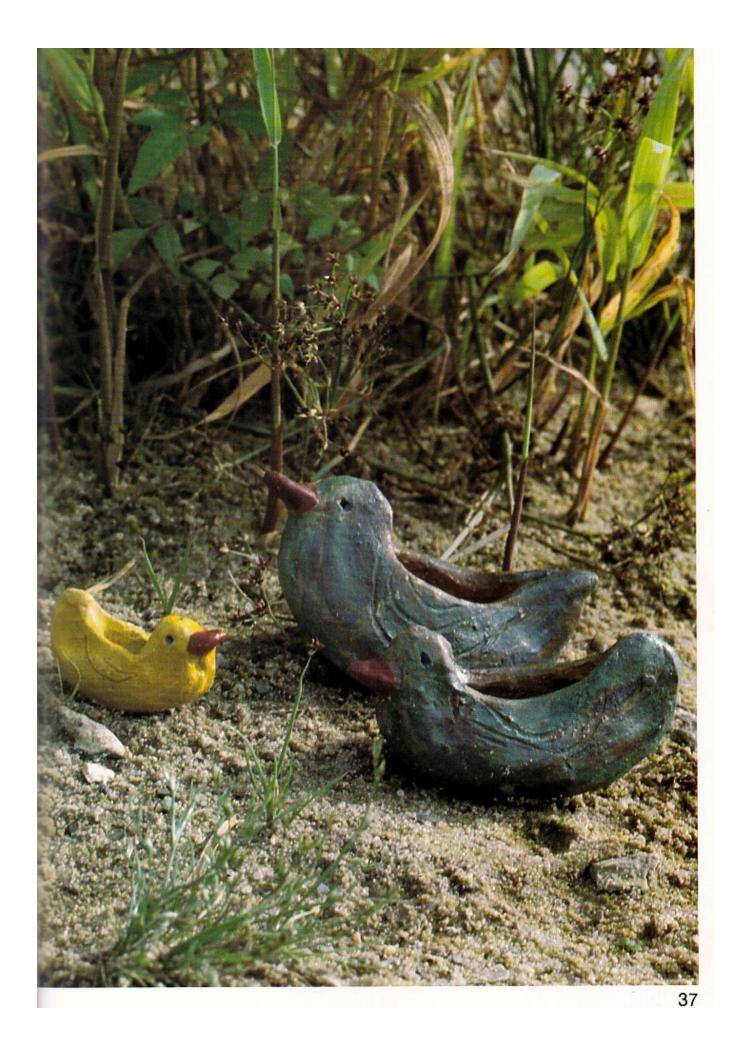
Rocking Duck



 Rock the duck back and forth on a flat surface until it can rock by itself.

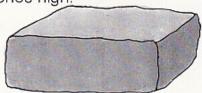


5. Let the duck dry completely. Then paint and shellac it.



Castle With a Moat

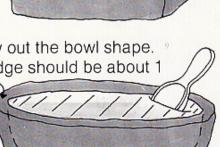
1. Cut a big piece of clay about 5 inches high.



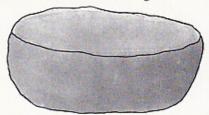
Hollow out the bowl shape. The edge should be about 1 inch

thick.

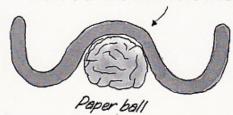
The castle's flag



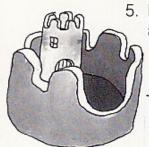
2. With your fist, pound the clay into a wide, round shape like a bowl, about 31/2 inches high.



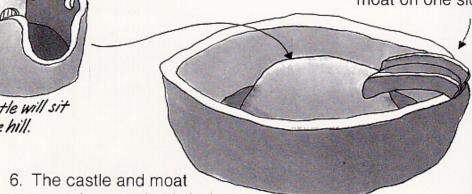
4. Put a ball of crushed paper underneath the bowl. Now there's a little hill in the middle.



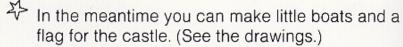
Make a little castle out of clay and put it on top of the hill. Build a bridge over the moat on one side.



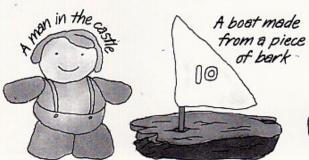
The castle will sit on the hill.



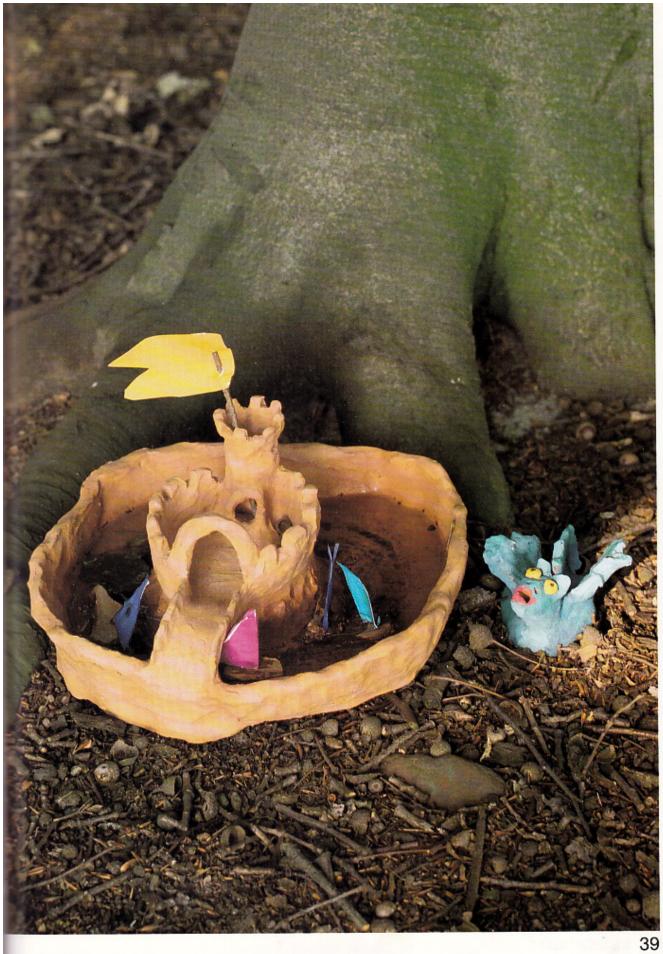
must dry completely before you have it fired in the kiln.











A Rattle and a Musical Canoe

The Rattle

1. Make a ball of crumpled paper. Press pieces of clay all around it. Press them good and tight. Leave an

opening in the

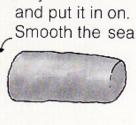
ball.

2. Pull the paper out through the hole. Fill the ball with.



Smooth everything well.

3. Close the hole with clay. Make a handle and put it in on. Smooth the seams.

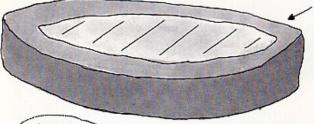


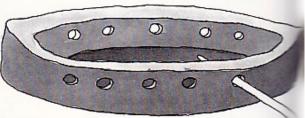
shake the rattle like this.

4. Poke little holes in the rattle and let it dry thoroughly Paint the rattle a bright color!

Musical Canoe 1. Form a canoe shape and hollow it out.

2. Poke holes in the sides.

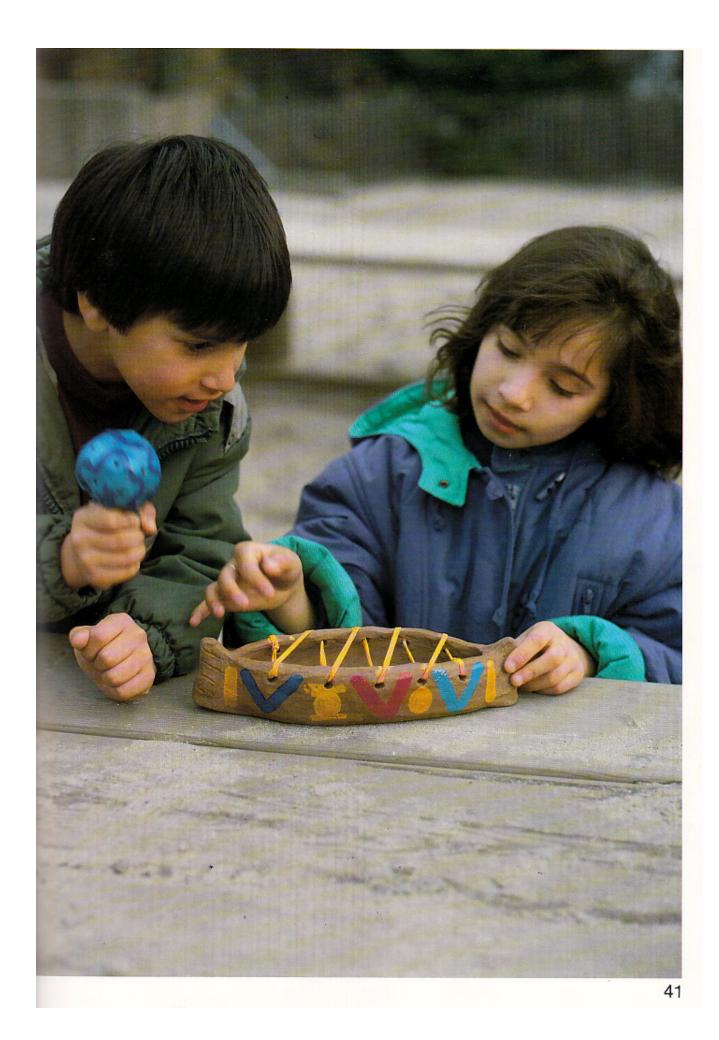






This is an Indian pattern.

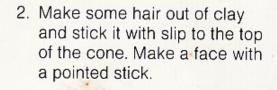
5. Pull a rubber band through the holes, as shown in the diagram. Fasten with knots. When you pluck the rubber band, you'll hear music.

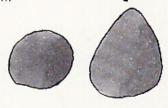


Viking Village

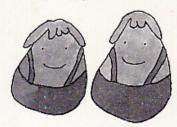
1. To make the Vikings:

Form a pointed cone out of a clay ball.





Eric and Brunhilde



3. When the Vikings are dry, you can paint some clothes on them.

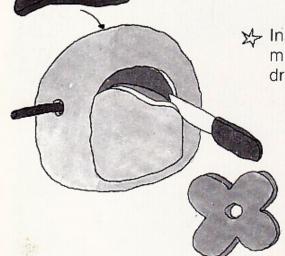
 The windmill is made just like the fragrance ball on page 50. Cut out windows and doors with a knife. (CAUTION: Be careful when using a knife, or have an adult do the cutting for you.)

The roof

Make the roof from a thin slice of clay, and stick it to the ball with a clay slip.

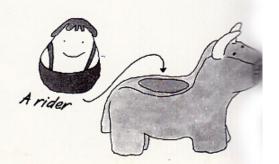
Insert a little stick into one side of the mill to hold the "blade." Let everything dry.

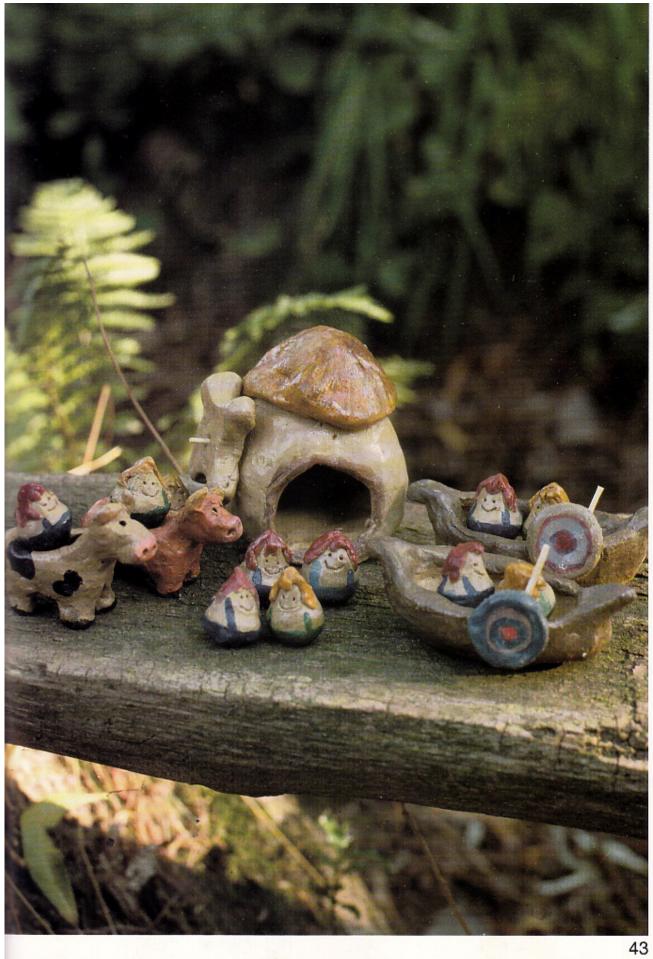
 Shape your windmill "blade." Put a hole in the middle. Let it dry. Then put the blade on the stick in the windmill. It will really turn!



The windmill blade

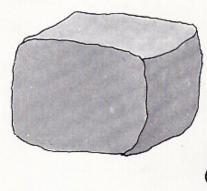
Make some animals for the Vikings. Make an indentation in the back of an animal so that a Viking can fit into it and go for a ride.



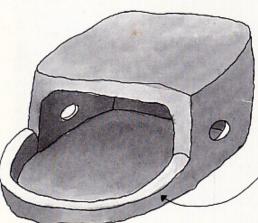


Potato Oven

 Form a thick clay block. Hollow out one side, pushing the dug-out clay toward the front, to make the front plate bigger and stronger.







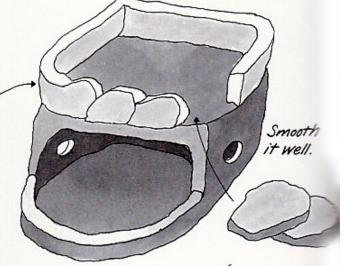
 Shape a rim around the front plate. Poke a hole on each side, as in the drawing.

 Put small pieces of clay all around the top edge of the oven. Smooth them all together into a rim. The top of the oven should be very smooth.

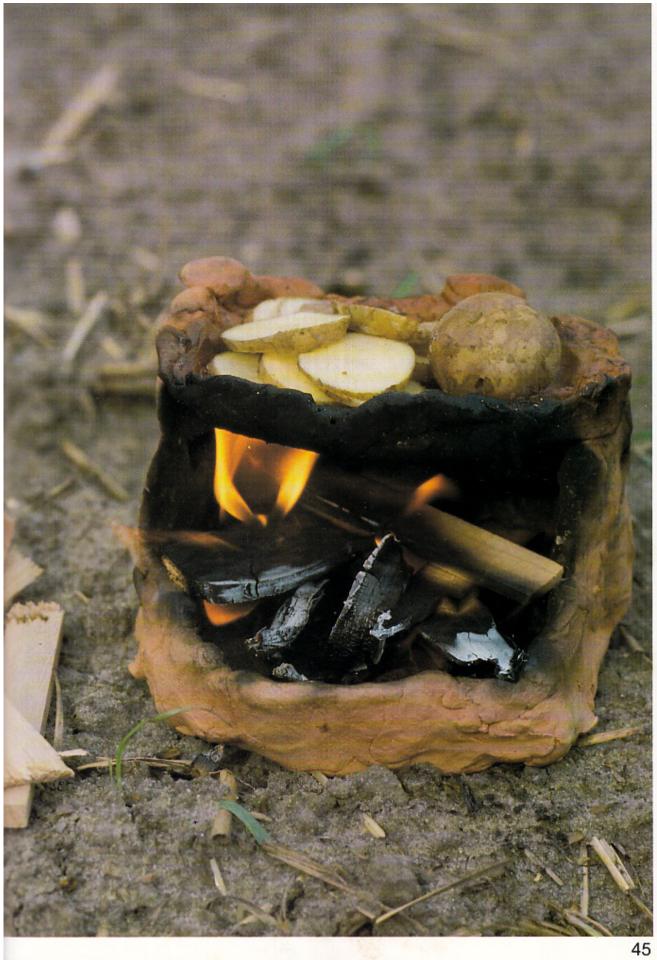
5. When the clay is good and dry, it can be fired in the kiln.

 The fire can be made with small pieces of charcoal. (CAUTION: Donot use the oven by yourself. Ask an adult to help you. Do not make a charcoal fire indoors.)

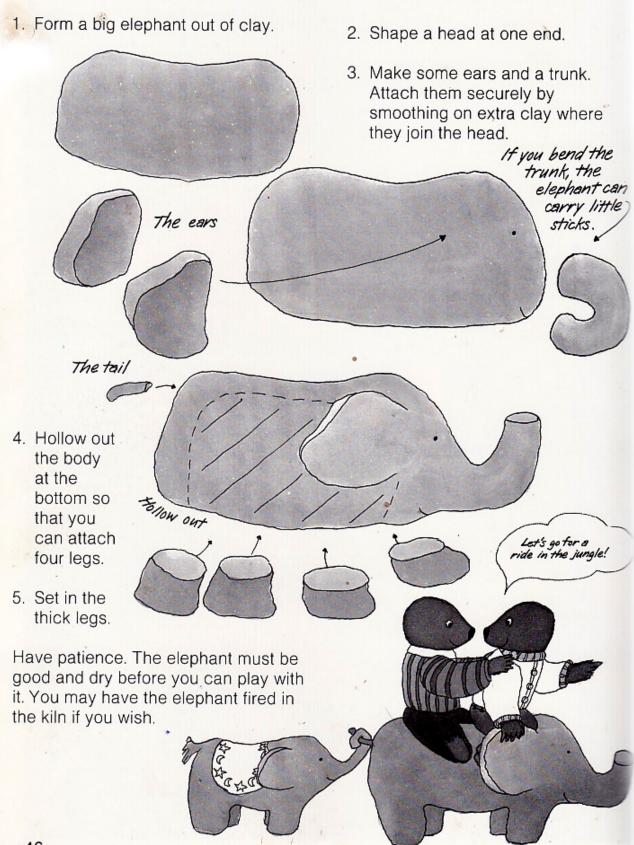
Cooking tips: Slice potatoes, spread them with oil, and put them in rows on top of the stove to roast.

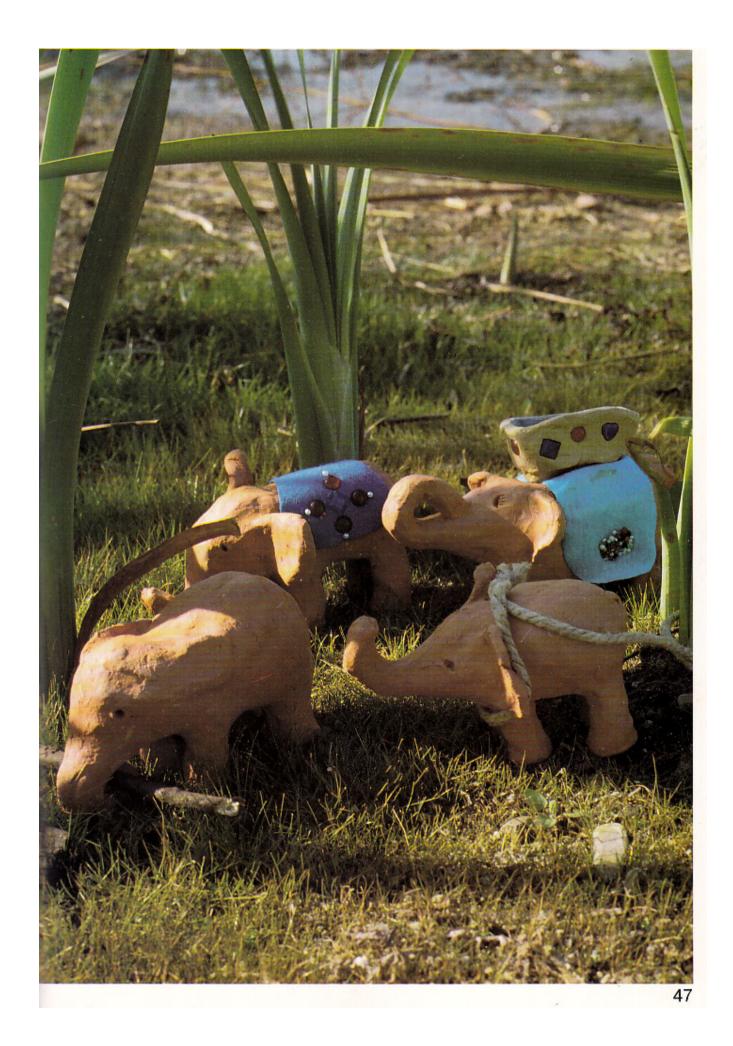




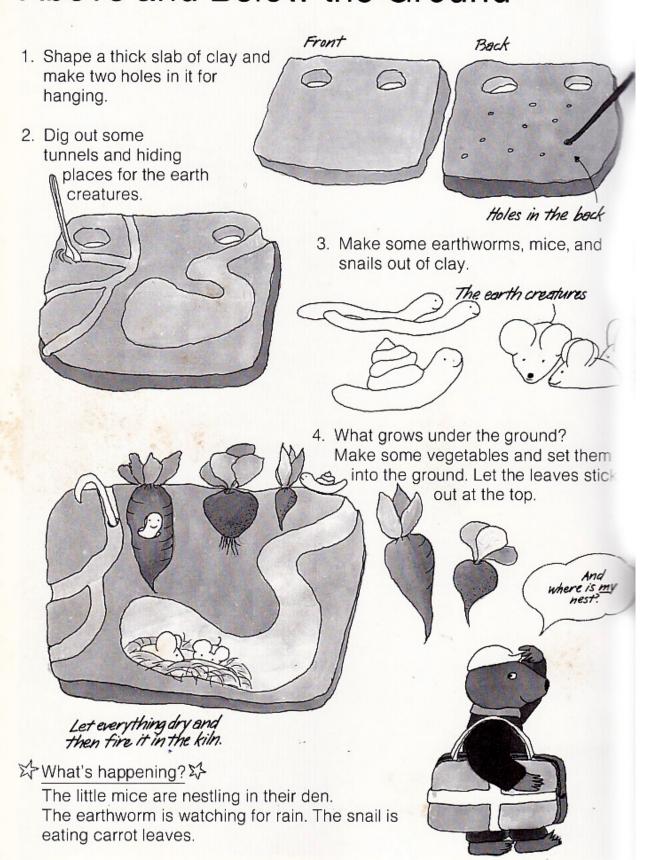


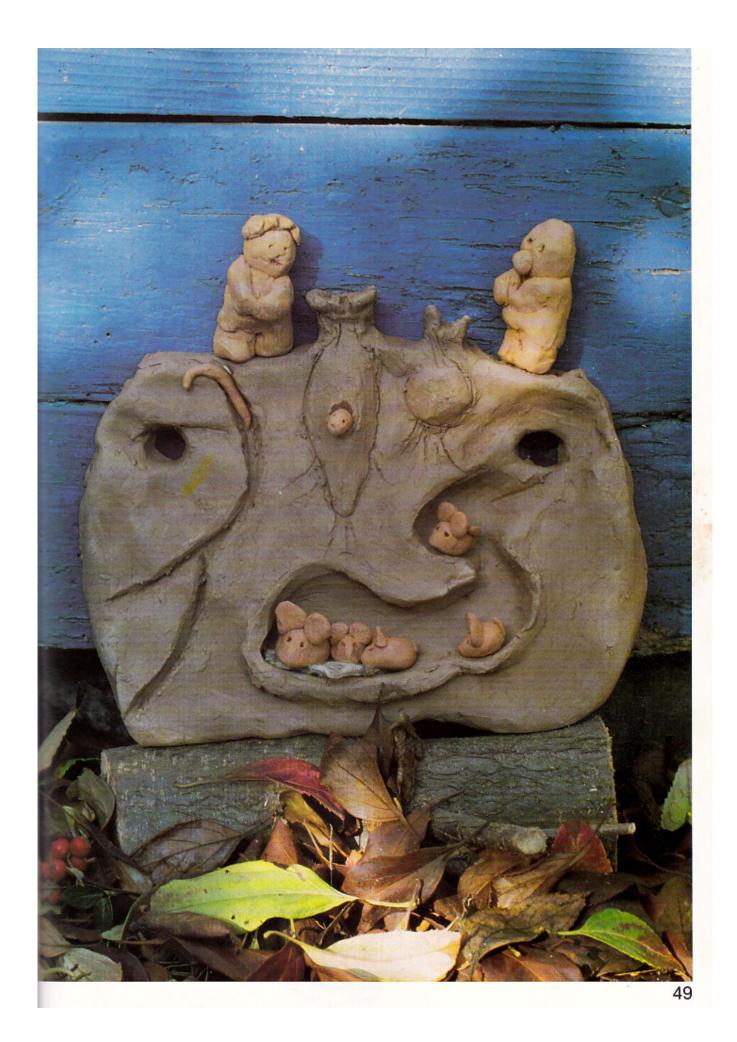
Elephant





Above and Below the Ground

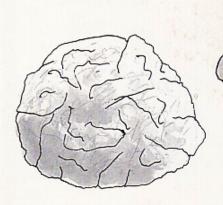




Fragrance Ball

Crumple some newspapers into a ball.

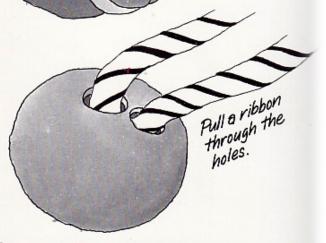
2. Take pieces of clay and flatten them out on a table. Wrap the pieces around the paper ball until it is all covered.



Make everything smooth and seamless.

3. Let the clay dry partially.

4. Make two holes on one side of the ball. Later you will pull a ribbon through these holes to hang the ball. Use a little stick to poke some air holes in the upper part of the ball.



Make another hole in the bottom of the ball, and pull out the paper.

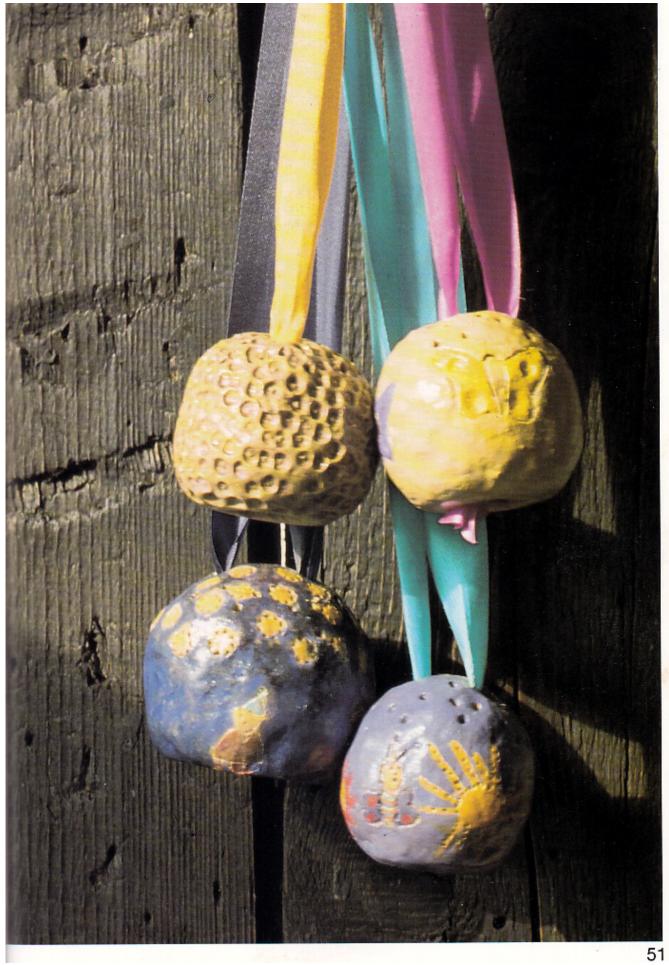
6. Scratch some designs in the ball.

7. When the ball is completely dry, paint it with poster paint and shellac it.

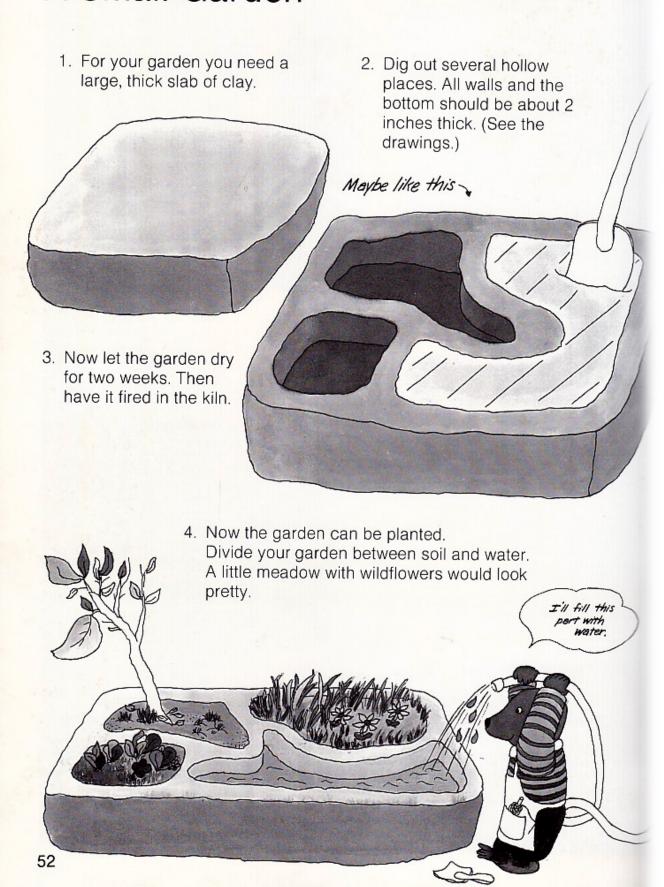
8. What smells do you like? Pine needles? Rose petals? Spices? Fill the ball with your favorite fragrant things.



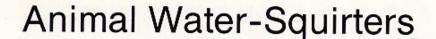




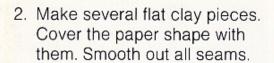
A Small Garden

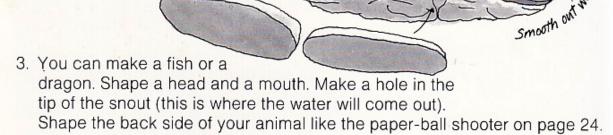


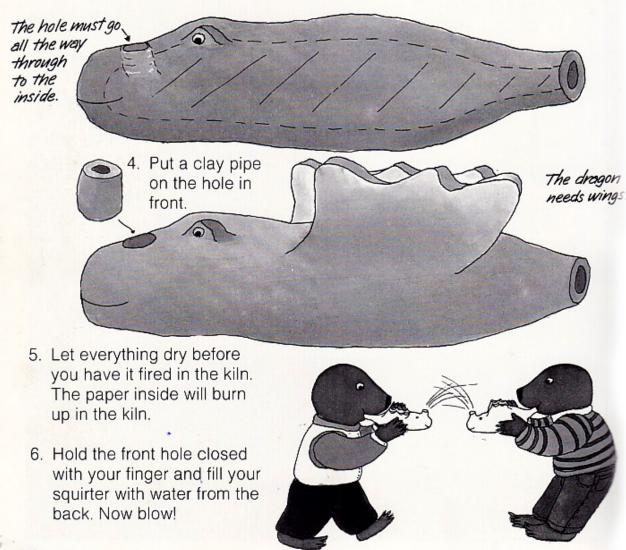


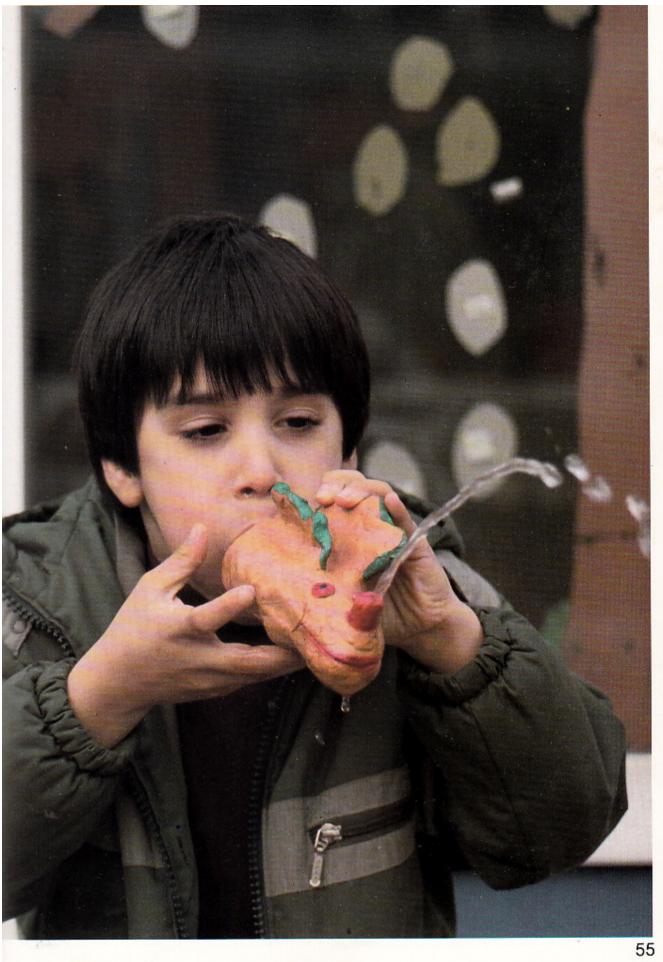


 Crumple newspaper into a long shape.

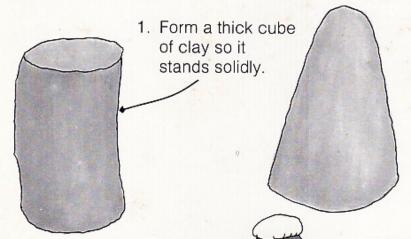








Marble Maiden



- Shape it into a rounded cone. Use a pencil to poke holes at the bottom so the air can escape.
- Shape a neck, a head, and a face. Attach some hair.

 Use your fingers to make the path smooth and wide enough for the marbles. Wrap a roll of clay around the figure. Hollow out the roll so that a marble can roll down the path.

Press firmly and fill in the cracks.

 Pull up the sides of the marble path a little so that the marble will stay in the path.

Let the marble maiden dry. Then paint it:

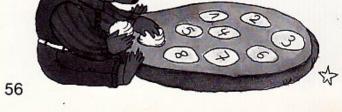
7. To make a game board:

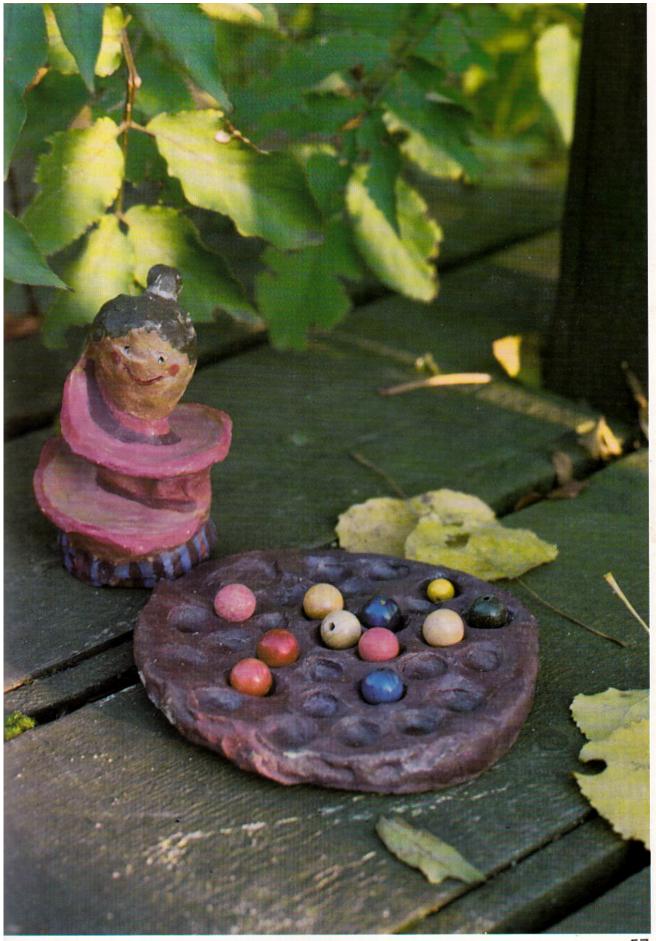
Make a flat, round disk of clay. Press in marbles to make holes. When the holes are dry, mark them with numbers.

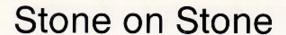
Rules of the game:

Each player gets five marbles and in turn lets one marble roll down the path on the marble maiden onto the game board. The number of the hole that marble lands on is the score for that turn. The player with the most points is the winner.

Who has the most points?



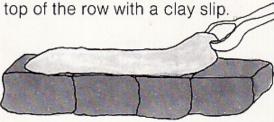


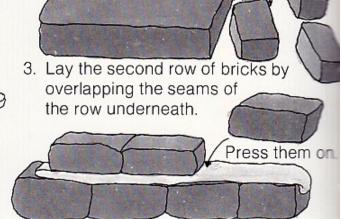


1. Cut bricks out of clay, about ½ inch high.

2. To build a wall:

Make a row of bricks. Cover the top of the row with a clay slip.

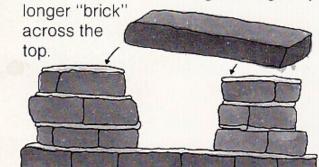




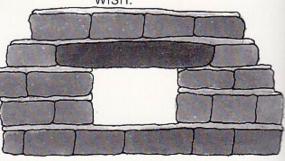
Repeat the pattern row by row.

4. To make a window:

Leave an opening as you build the wall. When the wall is high enough, lay a



Continue building. Make the wall as high as you wish.



Tie the with sti

6. The roof:

Build the roof out of small sticks. You can cover it with moss, grass or small clay shingles.

 You can also make your wall out of stones made from clay balls.



Use slip between the rows as you did with the bricks. You could make some clay people as well.

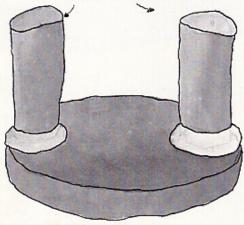


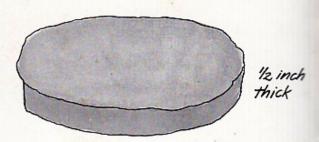


Hot-Dog Grill

 Cut out a round piece of clay 6 inches in diameter and ½ inch thick.







6 inches in diameter

- Attach two thick clay rolls. So that they will be secure, press a clay coil around the base of each one. Smooth out thoroughly.
- Form each roll into a V shape at the top to hold the skewers.
- Stick flat pieces of clay around the rim of your grill. This will keep ashes from falling out of the grill.
- Scratch a bark pattern into the spit holders. Then they will look like tree trunks.

Grilled vegetables are also tasty.



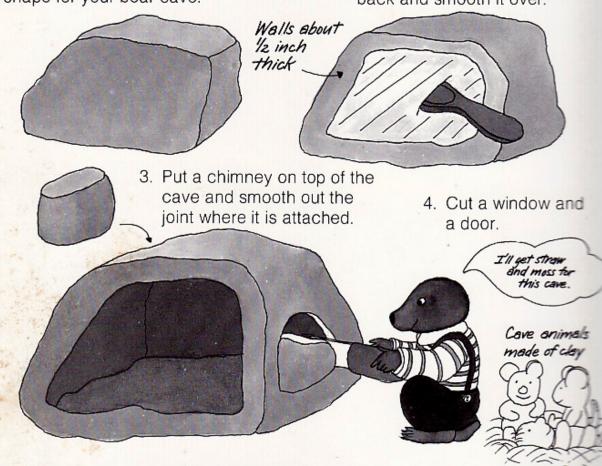
Let the grill dry thoroughly, then have it fired in the kiln.

Take the grill outdoors. Put little hot dogs on a skewer. Ask an adult to grill them over some charcoal.



Bear Cave

- 1. Prepare a large clump of clay by wedging, until it has the desired shape for your bear cave.
- 2. Hollow out the cave. If you take out too much clay, just put some back and smooth it over.



Who will live in the cave? Gnomes, cave people, or bears? out. 62

1. Make a clay body. Make a head, a nose. arms, legs, and feet out of clay and attach them to the body. Press firmly and smooth

> 2. Cut in a face and hair with a stick.

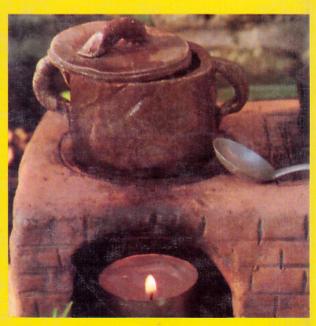
Let everything dry thoroughly











CRAFT BOOKS from Childrens Press

Building Your Own Toys

I Made It Myself

Christmas Crafts

Making Things for Easter
Making Things With Yarn
Toys Made of Clay

ISBN 0-516-09256-1